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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/796,756	03/08/2004	Adrian P. Stephens	42P18412	4365

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EXAMINER	
YOUNG, JANELLE N	
ART UNIT	PAPER NUMBER
2618	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/796,756	STEPHENS ET AL.	
	Examiner	Art Unit	
	Janelle N. Young	2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 June 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-27* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-27* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *08 March 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1, 16, & 22 have been considered but are moot in view of the new ground(s) of rejection.

Derryberry et al. teaches a method, comprising: transmitting data at a first and/or second transmit power level (Abstract; Col. 4, line 17-Col. 5, line 21; Col. 6, lines 10-29; and Col. 11, lines 6-24 of Derryberry et al.); determining a first and/or second value for a network traffic parameter at the first transmit power level (Col. 2, line 26-Col. 3, line 4; Col. 5, line 48-Col. 6, line 9; and Col. 8, line 47-Col. 9, line 9 of Derryberry et al.); and determining a second transmit power level different than the first transmit power level (Abstract; Col. 4, line 30-Col. 5, line 21; Col. 7, lines 21-55; Col. 8, line 47-Col. 9, line 9; Col. 9, line 56-Col. 10, line 15; and Col. 11, lines 6-24 of Derryberry et al.)

What Derryberry et al. does not explicitly teach is the observation of the communications' volume.

However, Feuerstein et al. teaches a method for adaptive transmit power control in wireless devices wherein the network traffic parameter is based on an observed capacity; which reads on claimed volume, of communications. Feuerstein et al. discloses that optimized network parameters may be provided to any combination of network elements including mobile units and base stations. For example, network parameters adjusted at a base station according to the present invention may include transmit power or receive sensitivity with respect to the cell, or a sector or beam, power

control parameters, such as thresholds, target settings, and operating ranges, and GOS metrics, such as BER, FER, voice quality, data throughput, packet success probabilities, dropped call rates, and call origination or termination success rates. Additionally, the network parameters adjusted at the base station may include sector orientation/rotation, sector or beam outboard reach, through attenuation or gain adjustment and/or antenna downtilt/uptilt. Systems and methods providing adjustable sector orientation and sizing suitable for use. (Col. 2, line 50-Col. 3, line 54; in respect to Col. 1, lines 40-52 and Col. 8, lines 11-45 of Feuerstein et al.).

It would have been obvious to one of ordinary skill of the art at the time the invention was made to incorporate a dynamic mobile parameter optimization, as taught by Feuerstein et al., in the method and apparatus for power control on a common channel in a telecommunication system of Derryberry et al., because Derryberry et al. already teaches a method and apparatus for power control in cellular telecommunication systems and, more particularly, to a method and system for power control on a common channel that may be shared by a plurality of mobile stations operating in a cellular telecommunication system (Col. 1, lines 9-13 of Derryberry et al.).

The motivation of this combination would be to provide a method and system for power control on a channel that is shared by multiple users in a telecommunication system, as taught by Derryberry et al. in Col. 4, lines 3-14, because it would allows the system to set an initial mobile station transmission power level and may be efficiently applied on a channel that carries a transmission. A cellular network utilizes the network parameters to control communication throughout the network and more particularly to

optimization of network parameters based on dynamic communication and network conditions such as traffic load and balancing conditions and/or changing interference conditions (Abstract; Col. 1, lines 20-25; and Col. 2, lines 26-37 of Feuerstein et al.).

The incorporation of controlling forward transmit power in a wireless system with power control on a common channel in a telecommunication system would utilizes a common channel that is shared by multiple mobile stations for transmitting the power control signaling from the base station to the mobile station (Col. 4, lines 17-29 of Derryberry et al. in correspondence with Col. 2, line 60-Col. 3, line 7 and Col. 8, lines 11-38 of Feuerstein et al.).

Specification

2. The abstract of the disclosure is objected, because the abstract is not a brief description of the technical disclosure in the applicant's specification. The current abstract does not enable the United States Patent and Trademark Office and the public generally to determine quickly from a cursory inspection the nature and gist of the technical disclosure. Applicant is reminded of the proper content of an abstract of the disclosure.

A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. If the patent is of a basic nature, the entire technical disclosure may be new in the art, and the abstract should be directed to the entire disclosure. If the patent is in the nature of an improvement in an old apparatus, process, product, or composition, the abstract should include the technical disclosure of the improvement. In certain patents, particularly

those for compounds and compositions, wherein the process for making and/or the use thereof are not obvious, the abstract should set forth a process for making and/or use thereof. If the new technical disclosure involves modifications or alternatives, the abstract should mention by way of example the preferred modification or alternative.

The abstract should not refer to purported merits or speculative applications of the invention and should not compare the invention with the prior art.

Where applicable, the abstract should include the following:

(1) if a machine or apparatus, its organization and operation;

(2) if an article, its method of making;

(3) if a chemical compound, its identity and use;

(4) if a mixture, its ingredients;

(5) if a process, the steps.

Extensive mechanical and design details of apparatus should not be given.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The

disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

Correction is required. See MPEP § 608.01(b).

Response to Amendment

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Derryberry et al. (US Patent 6498785) and further in view of Feuerstein et al. (US Patent 6141565).

As to claim 1, Derryberry et al. teaches a method, comprising:

transmitting data at a first and/or second transmit power level (Abstract; Col. 4, line 17-Col. 5, line 21; Col. 6, lines 10-29; and Col. 11, lines 6-24 of Derryberry et al.);

determining a first and/or second value for a network traffic parameter at the first transmit power level (Col. 2, line 26-Col. 3, line 4; Col. 5, line 48-Col. 6, line 9; and Col. 8, line 47-Col. 9, line 9 of Derryberry et al.);

determining a second transmit power level different than the first transmit power level (Abstract; Col. 4, line 30-Col. 5, line 21; Col. 7, lines 21-55; Col. 8,

line 47-Col. 9, line 9; Col. 9, line 56-Col. 10, line 15; and Col. 11, lines 6-24 of Derryberry et al.); and

What Derryberry et al. does not explicitly teach is the observation of the communications' volume.

However, Feuerstein et al. teaches a method for adaptive transmit power control in wireless devices wherein the network traffic parameter is based on an observed capacity; which reads on claimed volume, of communications. Feuerstein et al. discloses that optimized network parameters may be provided to any combination of network elements including mobile units and base stations. For example, network parameters adjusted at a base station according to the present invention may include transmit power or receive sensitivity with respect to the cell, or a sector or beam, power control parameters, such as thresholds, target settings, and operating ranges, and GOS metrics, such as BER, FER, voice quality, data throughput, packet success probabilities, dropped call rates, and call origination or termination success rates. Additionally, the network parameters adjusted at the base station may include sector orientation/rotation, sector or beam outboard reach, through attenuation or gain adjustment and/or antenna downtilt/uptilt. Systems and methods providing adjustable sector orientation and sizing suitable for use. (Col. 2, line 50-Col. 3, line 54; in respect to Col. 1, lines 40-52 and Col. 8, lines 11-45 of Feuerstein et al.).

It would have been obvious to one of ordinary skill of the art at the time the invention was made to incorporate a dynamic mobile parameter optimization, as taught by Feuerstein et al., in the method and apparatus for power control on a common

channel in a telecommunication system of Derryberry et al., because Derryberry et al. already teaches a method and apparatus for power control in cellular telecommunication systems and, more particularly, to a method and system for power control on a common channel that may be shared by a plurality of mobile stations operating in a cellular telecommunication system (Col. 1, lines 9-13 of Derryberry et al.).

The motivation of this combination would be to provide a method and system for power control on a channel that is shared by multiple users in a telecommunication system, as taught by Derryberry et al. in Col. 4, lines 3-14, because it would allows the system to set an initial mobile station transmission power level and may be efficiently applied on a channel that carries a transmission. A cellular network utilizes the network parameters to control communication throughout the network and more particularly to optimization of network parameters based on dynamic communication and network conditions such as traffic load and balancing conditions and/or changing interference conditions (Abstract; Col. 1, lines 20-25; and Col. 2, lines 26-37 of Feuerstein et al.).

The incorporation of controlling forward transmit power in a wireless system with power control on a common channel in a telecommunication system would utilizes a common channel that is shared by multiple mobile stations for transmitting the power control signaling from the base station to the mobile station (Col. 4, lines 17-29 of Derryberry et al. in correspondence with Col. 2, line 60-Col. 3, line 7 and Col. 8, lines 11-38 of Feuerstein et al.).

As to claim 2, Derryberry et al. teaches a method, wherein said determining a first value comprises determining a first throughput value and said determining a second

value comprises determining a second throughput value (Col. 2, line 26-Col. 3, line 24; Col. 6, line 42-Col. 7, line 55; and Col. 8, line 9-Col. 9, line 9 of Derryberry et al.).

As to claims 3-4, Derryberry et al. teaches a method, further comprising subsequently transmitting data at the second transmit power level responsive to one of the following two-part conditions:

the second transmit power level being less than the first transmit power level and the second throughput value being and/or not being approximately equal to the first throughput value (Col. 9, line 56-Col. 10, line 50 of Derryberry et al.); and

the second transmit power level being greater than the first transmit power level and the second throughput value being and/or not being greater than the first throughput value (Col. 4, line 30-Col. 5, line 21 and Col. 9, line 56-Col. 10, line 50 of Derryberry et al.).

As to claim 5, Derryberry et al. teaches a method, wherein said determining a first value comprises determining a first network loading value and said determining a second value comprises determining a second network loading value (Col. 2, lines 18-24; Col. 3, lines 13-24; Col. 4, line 30-Col. 5, line 21 of Derryberry et al.).

As to claims 6-7, Derryberry et al. teaches a method, wherein said determining a second transmit power level comprises determining a second transmit power level less than and/or greater than the first transmit power level responsive to the first network loading value being less than and/or greater than a target value (Col. 4, line 30-Col. 5,

line 21; Col. 8, line 47-Col. 9, line 22; and Col. 9, line 56-Col. 10, line 50 of Derryberry et al.).

As to claim 8, Derryberry et al. teaches an article, comprising a machine-readable medium that provides instructions, which when executed by a computing platform, cause said computing platform to perform operations comprising:

transmitting data at a first transmit power level (Abstract; Col. 4, line 17-Col. 5, line 21; Col. 6, lines 10-29; and Col. 11, lines 6-24 of Derryberry et al.);

determining a first data throughput value based on transmissions at the first transmit power level and determining a second data throughput value based on transmissions at the second transmit power level (Col. 2, line 26-Col. 3, line 24; Col. 4, line 30-Col. 5, line 21; Col. 6, line 42-Col. 7, line 55; and Col. 8, line 9-Col. 9, line 9 of Derryberry et al.);

transmitting data at a second transmit power level different than the first transmit power level (Abstract; Col. 4, line 30-Col. 5, line 21; Col. 7, lines 21-55; Col. 8, line 47-Col. 9, line 9; Col. 9, line 56-Col. 10, line 15; and Col. 11, lines 6-24 of Derryberry et al.); and

setting a subsequent transmit power level at one of the first transmit power level and the second transmit power level, based on a comparison between the first and second data throughput values (Col. 1, line 53-Col. 2, line 24; Col. 4, line 30-Col. 5, line 21; Col. 9, line 54-Col. 10, line 38 of Derryberry et al.).

Regarding claim 9, see explanation as set forth regarding claim 3 (method claim) because the claimed article for adaptive transmit power control in wireless devices would perform the method steps

Regarding claim 10, see explanation as set forth regarding claim 4 (method claim) because the claimed article for adaptive transmit power control in wireless devices would perform the method steps

As to claim 11, Derryberry et al. teaches an article, wherein the first and second transmit power levels are each less than a predefined maximum transmit power level and greater than a predefined minimum transmit power level.

As to claim 12, Derryberry et al. teaches an article comprising a machine-readable medium that provides instructions, which when executed by a computing platform, cause said computing platform to perform operations comprising:

setting a first transmit power level (Abstract; Col. 4, lines 17-29; Col. 7, lines 21-55; and Col. 10, line 35-50 of Derryberry et al.);

transmitting data at the first transmit power level (Abstract; Col. 4, line 17-Col. 5, line 21; Col. 6, lines 10-29; and Col. 11, lines 6-24 of Derryberry et al.);

determining a first network loading value based on data transmitted at the first transmit power level (Col. 2, lines 18-24; Col. 3, lines 13-24; Col. 4, line 30-Col. 5, line 21 of Derryberry et al.);

comparing the network loading value with a predefined range of network loading values (Col. 4, line 30-Col. 5, line 21 and Col. 9, line 56-Col. 10, line 28 of Derryberry et al.); and

changing the transmit power level for a subsequent transmission of data based on a result of said comparing (Abstract; Col. 4, lines 3-14; Col. 6, lines 30-41; Col. 9, line 56-Col. 10, line 28; and Col. 10, line 35-Col. 11, line 5 of Derryberry et al.).

As to claim 13, Derryberry et al. teaches an article, wherein said changing comprises decreasing the transmit power level for the subsequent transmission responsive to the network loading value being less than a minimum value in the predefined range (Col. 2, line 17-Col. 3, line 24; Col. 4, line 30-Col. 5, line 21; and Col. 10, lines 35-50).

As to claim 14, Derryberry et al. teaches an article, wherein said changing comprises increasing the transmit power level for the subsequent transmission responsive to the network loading value being greater than a maximum value in the predefined range (Col. 2, line 17-Col. 3, line 24; Col. 4, line 30-Col. 5, line 21; Col. 10, lines 35-50; and Col. 11, lines 6-24 of Derryberry et al.).

As to claim 15, Derryberry et al. teaches an article, wherein said changing comprises one of:

increasing the transmit power level for the subsequent transmission responsive to the network loading value being greater than a predefined value (Col. 2, line 17-Col. 3, line 24; Col. 4, line 30-Col. 5, line 21; and Col. 10, lines 35-50 of Derryberry et al.); and

decreasing the transmit power level for the subsequent transmission responsive to the network loading value being less than the predefined value

(Col. 2, line 17-Col. 3, line 24; Col. 4, line 30-Col. 5, line 21; Col. 10, lines 35-50; and Col. 11, lines 6-24 of Derryberry et al.).

Regarding claim 16, see explanation as set forth regarding claim 1 (method claim) because the claimed apparatus for adaptive transmit power control in wireless devices would perform the method steps.

Regarding claim 17, see explanation as set forth regarding claim 3 (method claim) because the claimed apparatus for adaptive transmit power control in wireless devices would perform the method steps.

Regarding claim 18, see explanation as set forth regarding claim 4 (method claim) because the claimed apparatus for adaptive transmit power control in wireless devices would perform the method steps.

Regarding claim 19, see explanation as set forth regarding claim 6 (method claim) because the claimed apparatus for adaptive transmit power control in wireless devices would perform the method steps.

Regarding claim 20, see explanation as set forth regarding claim 7 (method claim) because the claimed apparatus for adaptive transmit power control in wireless devices would perform the method steps.

As to claim 21, Derryberry et al. teaches an apparatus, wherein the first predetermined value is a minimum value in a predetermined range of values and the second predetermined value is a maximum in the predetermined range of values (Col. 2, line 17-Col. 3, line 24; Col. 4, line 30-Col. 5, line 21; and Col. 9, line 56-Col. 10, line 28 of Derryberry et al.).

Regarding claim 22, see explanation as set forth regarding claim 1 (method claim) because the claimed system for adaptive transmit power control in wireless devices would perform the method steps.

Regarding claim 23, see explanation as set forth regarding claim 3 (method claim) because the claimed system for adaptive transmit power control in wireless devices would perform the method steps.

Regarding claim 24, see explanation as set forth regarding claim 4 (method claim) because the claimed system for adaptive transmit power control in wireless devices would perform the method steps.

Regarding claim 25, see explanation as set forth regarding claim 6 (method claim) because the claimed system for adaptive transmit power control in wireless devices would perform the method steps.

Regarding claim 26, see explanation as set forth regarding claim 7 (method claim) because the claimed system for adaptive transmit power control in wireless devices would perform the method steps.

Regarding claim 27, see explanation as set forth regarding claim 11 (article claim) because the claimed system for adaptive transmit power control in wireless devices would perform the article steps.

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Janelle N. Young whose telephone number is (571) 272-

2836. The examiner can normally be reached on Monday through Friday: 8:30 am through 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on (571) 272-7882. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JNY
March 26, 2007

NAY MAUNG
SUPERVISORY PATENT EXAMINER